



(19) RU⁽¹¹⁾ 2 109 369⁽¹³⁾ C1
(51) Int. Cl.⁶ H 01 J 37/28

RUSSIAN AGENCY
FOR PATENTS AND TRADEMARKS

(12) ABSTRACT OF INVENTION

(21), (22) Application: 96122116/28, 18.11.1996

(46) Date of publication: 20.04.1998

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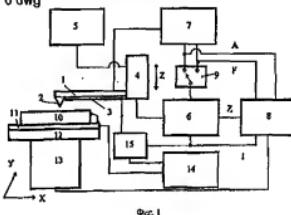
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(54) PROBE-TYPE SCANNING MICROSCOPE AND TECHNIQUE FOR MEASURING SURFACE PROPERTIES BY
THIS MICROSCOPE

(57) Abstract:

FIELD: measurement technology.
SUBSTANCE: microscope probe has conducting needle and is made in the form of resonator connected to vibration exciting circuit and provided with probe vibration frequency and amplitude measuring device. Measuring technique involves application of DC voltage between needle and specimen, probe setting in vibration by means of exciting circuit, and specimen scanning while maintaining constant the vibration frequency or amplitude, or current between needle and specimen. Signal across probe displacement mechanism, probe vibration frequency and amplitude, and current through needle and specimen measured in the process are used to

determine configuration, mechanical and electrical characteristics of surface.
EFFECT: Improved measurement accuracy. 3 cl, 6 dwg



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